

A monthly review of energy-related news

South Africa Energy Roundup

JUNE 2017

Coal

Eskom demands R6.2bn from Mpumalanga coal supplier

State-owned power utility Eskom is demanding R6.2-billion from Mpumalanga billionaire pastor and coal baron Ramesh Joe Singh after his firm Just Coal supplied the power utility's Tutuka power station with suboptimal coal worth R5.8-billion. The poor-quality coal put the operations of Tutuka power station, in Mpumalanga, at risk.

Eskom has since cancelled the contract with Just Coal and has approached National Treasury "to jointly agree on suitable alternative mechanisms to source coal". Eskom has previously penalised Joe Singh Group – which comprises Just Coal, Ferret Coal Kendell and Fentonia Colliery – five times for similar transgressions in 2016. The group paid fines totalling R9.65-million to the power utility.

Eskom resolute on Tegeta coal contract

Brian Molefe has brushed aside calls from MPs for State-owned Eskom's Brakfontein coal contract with Gupta family-linked Tegeta to be cancelled, saying Eskom has been through a self-corrective exercise to resolve its procurement problems. Molefe, who at the time was Eskom's CEO, said Eskom had asked PwC for a review of its control environment of coal deals and that the audit firm in November 2015 had flagged 46 problem areas applying not only to Tegeta, but also to other coal supply contracts. Eskom set about resolving the issues, including better control of data and documents, and by September 2016, between six and eight still had to be dealt with. That figure had now dropped to one outstanding issue, he said. Molefe, whose reappointment as Eskom CEO was rescinded at the end of May, has emphasised that he joined Eskom only a month after the Brakfontein coal contract was signed in March 2015.

PwC has found that the contract was badly and hastily drafted, with clauses apparently cut and pasted from elsewhere. Eskom chairperson Ben Ngubane said, when considering the context, it should be borne in mind that the country was at the time again facing the threat of load-shedding, which had in 2008 prompted it to do away with competitive bidding to procure coal urgently.

Eskom says plan to mothball power plants only a 'scenario'

Plans unveiled in March to decommission five coal-fired power station are not set in stone and could be shelved depending on economic growth and other factors, State-owned Eskom chairperson Ben Ngubane has said. He told newswire Reuters that the capacity requirements of these power stations would be reduced by the addition of power from independent power producers (IPPs).

However, if the pace of adding IPP projects to the grid does not take place as quickly as anticipated, or if economic growth improves, then the plants will not be mothballed.

Nuclear

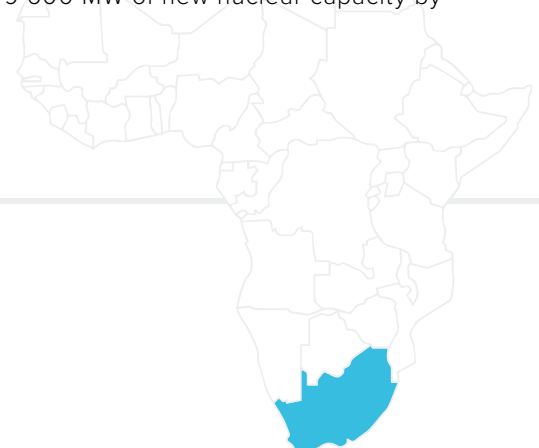
Advances in PBMR design demonstrate possible cost, efficiency benefits – Eskom

Advances have been made in the new Pebble Bed Modular Reactor (PBMR) design, which show promise for being cheaper and less complicated than previous designs, says State utility Eskom. The design for PBMRs was initially developed in South Africa. Research into PBMRs was mothballed in 2010, but has since been reopened. Eskom chief nuclear officer David Nicholls presented a concept design at African Utility Week, in May. The design is likely to be about 50% more efficient and "probably half the cost" of the earlier design.

DoE won't appeal nuclear ruling, but new determination possible ahead of IRP update

The Department of Energy (DoE) will not appeal the April 26 ruling of the Western Cape High Court, which declared the processes hitherto used to procure new nuclear capacity to be unconstitutional and illegal, along with three nuclear-related intergovernmental agreements (IGAs).

Nevertheless, Energy Minister Mmamoloko Kubayi has left the door open for the issuance of a new legally compliant nuclear determination ahead of the finalisation of a new Integrated Resource Plan (IRP), which will be updated only in the first quarter of 2018. The current IRP was drafted in 2010 and provides the policy framework to procure 9 600 MW of new nuclear capacity by



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2030. The update is expected to scale back and defer the introduction of any additional nuclear capacity.

The DoE will start renegotiating IGAs on nuclear cooperation with five nations in June.

Koeberg Unit 2 restarted after maintenance shutdown

Koeberg power station's Unit 2 was reconnected to State-owned power company Eskom's national electricity grid on May 24, following a 36-day planned maintenance outage.

The outage, dubbed Outage 222, as it is the twenty-second outage on Unit 2, has become the second-shortest outage performed in the station's history, surpassed only by a 32-day outage on Unit 1 in 1999.

Necsa signs skills-related MoU with French utility

The South African Nuclear Energy Corporation (Necsa) and French electric utility company Electricité de France (EDF) have signed a memorandum of understanding (MoU) to advance training and development of technical skills and, to continue education and training of technicians, in the nuclear energy sector.

The MoU will steer the development of South Africa's resources, through the design of training courses, the coaching of instructors and the development of the training infrastructure required to efficiently educate the technicians for nuclear energy projects.

Necsa and EDF will also collaborate on the development of the required network of institutes at technical and vocational education and training colleges in South Africa, with relevant connections to international institutes. Further, some technicians will receive on-the-job training in certain EDF facilities for selected technical positions.

No corruption in nuclear negotiations, Eskom chief nuclear officer assures

Eskom's chief nuclear officer, David Nicholls, is still firmly committed to the principle that nuclear is the way to go for a sustainable energy future and says he knows of no corruption in negotiations on a deal to procure new nuclear energy capacity. "I've been in the middle of this deal for years. People are talking about secret Russian deals. Show

me the secret plan signed with the Russians. I have no knowledge of a secret plan," he told delegates attending a special session on nuclear at the African Utility Week, in Cape Town, in May. Nicholls said there was a presumption that there was corruption because so much money was involved in a nuclear deal. But he said corruption was unlikely in such a large deal.

Thyspunt nuclear power plant would bring great benefits to the region – CDC

The Eastern Cape is holding out hope that the planned Thyspunt nuclear power plant will be built in the province despite the nuclear deal being put on ice for now. A site between St Francis Bay and Oyster Bay has been identified for the plant – the first reactor planned in the fleet.

Coega Development Corporation (CDC) energy business development manager Sandisiwe Ncemane says the plant will hold great economic benefits for the province. It has the potential to create about 22 900 formal sector jobs.

Multiplier estimates show that for every rand spent on nuclear, the local economy will benefit R1.04, with a benefit of R1.18 to the broader economy and R1.87 for the national economy. Ncemane says the expected R25-billion site development will extend up to the Coega and Port Elizabeth harbours, with bridges, roads and electricity all related to getting the area ready for the nuclear build.

Renewable energy

Commercial operations start at Enel's Gibson Bay Wind Farm

Enel, through its subsidiary Enel Green Power (EGP), has started commercial operations at its 111 MW Gibson Bay Wind Farm, in the Kouga municipality of the Eastern Cape. The Gibson Bay Wind Farm can generate about 420 GWh/y, while cutting carbon dioxide emissions by more than 383 000 t/y. The wind farm is supported by a 20-year power supply agreement with State-owned Eskom, under government's Renewable Energy Independent Power Producer Procurement Programme.



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CSP projects boost South Africa's green economy

Global private engineering company Sener believes the 50 MW Bokpoort concentrated solar power (CSP) plant, together with the 100 MW Ilanga and 100 MW Kathu CSP plants, will significantly contribute to South Africa's green economy. Sener is the engineering, procurement and construction partner on all three plants, which are all located in the Northern Cape.

Bokpoort was launched last year and Kathu and Ilanga are due for completion by December 2018. During a recent media tour of the Ilanga and Bokpoort plants, Sener Southern Africa regional MD Siyabonga Mbanjwa said the plants provide clean, renewable energy, addressing the National Development Plan's goal of growing a green economy.

Determinations for renewable energy and other IPP programmes to be reviewed

Recently appointed Energy Minister Mmamoloko Kubayi has said that all Ministerial determinations for electricity capacity, including renewable energy, may need to be reviewed in light of the recent ruling by the Western Cape High Court, which set aside two nuclear determinations as "unlawful and unconstitutional" on the basis that they had not been subjected to public consultation ahead of concurrence by the National Energy Regulator of South Africa (Nersa). Likewise, determinations for renewable energy, coal, gas and hydro had not been subjected to Nersa-led public consultations, which, Kubayi says, means that remedial steps will have to be taken to ensure that these determinations are not open to legal challenge. The department is still considering its options in this regard.

IPP Office to be incorporated into Central Energy Fund

South Africa's highly respected Independent Power Producer (IPP) Office, which has overseen nearly R200-billion-worth of renewable-energy investment since 2011, is to be incorporated into the Central Energy Fund (CEF), which itself is to be overhauled.

Energy Minister Mmamoloko Kubayi announced plans for the restructuring during her inaugural Budget Vote address in May. Without elaborating, she indicated that the IPP Office faced financial constraints, which could be resolved through its incorporation under CEF.

Renewable Energy Holdings signs private power supply contract

Bethlehem Hydro, an independent power producer and subsidiary of Renewable Energy Holdings (REH), has entered into a contract under which the full output from its 4 MW Merino hydropower plant, near Clarens, in the Free State, will be sold to electricity trader PowerX. REH and Bethlehem Hydro CEO Anton-Louis Olivier says the transaction makes commercial sense in the context of the current uncertainty in the power market in South Africa. Initially, the Merino plant sold its output to Eskom under a short-term supply programme. However, earlier this year, the parastatal stopped purchasing power under this programme. "Not only was PowerX able to offer us an attractive tariff, but also a long-term contract with the necessary guarantees that such a transaction requires," Olivier highlights. The Merino power plant generates about 25 GWh/y of electricity.

Task team established to deliberate on renewables impasse

A joint task team set up to find solutions to the current impasse holding back the signing of power purchase agreements (PPAs) for 37 renewable-energy projects procured in 2015 will report back in early June. The task team comprises officials from the Department of Energy, supported by the Independent Power Producer Office, as well as from the Department of Public Enterprises, supported by executives from State-owned electricity utility Eskom. Since mid-2016, the State-owned utility has openly defied government policy regarding the procurement of the projects, citing a lack of visibility over the cost-recovery mechanism. The PPAs have also not been signed despite a commitment by President Jacob Zuma in his February State of the Nation address that all the contracts would be signed.

US awards grant to S African renewable-energy company

The US Trade and Development Agency has awarded a grant to Pele Green Energy, a South African independent power developer based in Johannesburg. The grant will fund a feasibility study to assess the viability of a 75 MW solar photovoltaic power plant in the Free State province of South Africa. The objective of the feasibility study is to provide Pele Green Energy with the necessary analyses required to prepare a competitive proposal for the next



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round of South Africa's Renewable Energy Independent Power Producer Procurement Programme and to assess other options for the project to sell its output directly to interested public and private sector offtakers. Pele Green Energy selected Castalia, an independent economic and financial advisory firm, to conduct the feasibility study.

Gas-to-power

Gas-to-power essential for South Africa's future energy mix – Siemens

With a fall in gas prices and a stagnant economy, gas-fired power plants may not be as attractive an option as they were a few years ago, but they will still form a vital part of South Africa's energy mix in future.

Siemens Southern and Eastern Africa CEO Sabine Dall'Omo says gas as an industry has the potential to unlock a new wave of industrial development in Africa, but it could still take some time for this to happen. While foreign investors are seeking investment opportunities in the gas industry elsewhere in the world, it is vital to keep the momentum about gas going in South Africa and to continue to encourage investors to remain interested. She says Siemens is not overly concerned about the delays. "We will see it through."

Minister expresses support for 3 700 MW gas-to-power vision

Energy Minister Mmamoloko Kubayi has expressed her support for the proposed 3 700 MW gas-to-power programme, assuring delegates to a conference in Cape Town that government intends proceeding in line with the existing "vision and policy objectives" for gas infrastructure. Her speech came amid significant uncertainty about the future of South Africa's independent power producer programmes, owing to State-owned power utility Eskom's ongoing refusal to conclude power purchase agreements (PPAs) for 37 outstanding renewable-energy projects and fresh questions about the legal standing of all Ministerial determinations, which provide the framework to procure of new generation capacity.

Nevertheless, the Minister's support for the gas programme in its current form suggests that a procurement process

should still arise in line with a Liquefied Natural Gas Independent Power Producer Procurement Programme (LNG IPPPP) project information memorandum published in May last year.

The memorandum states that South Africa will initially build gas infrastructure at Richards Bay, in KwaZulu-Natal, and Coega, in the Eastern Cape, for use by electricity generators, as well as by energy-intensive industries.

The Department of Energy envisages separate procurement processes for each site. Initially it was anticipated that a request for qualifications would be released before the end of 2016, followed by a commercial tender in early 2017.

However, the LNG IPPPP process was now not expected to proceed until PPAs for the outstanding renewables projects had been signed by Eskom.

Eskom funding and tariffs

Busa urges Nersa to reject Eskom's request to deviate from tariff methodology

Business Unity South Africa (Busa) has criticised what it describes as State-owned Eskom's request for a "blanket condonation" from the National Energy Regulator of South Africa (Nersa) to deviate from the multiyear price determination (MYPD) methodology and minimum information requirements for tariff applications (Mirta).

In a letter to Nersa earlier this year, Eskom CFO Anoj Singh indicated that the utility would be submitting a one-year revenue application for 2018/19 on June 1. However, he also indicated that Eskom would be unable to meet certain requirements of the MYPD methodology, as updated in October 2016, as well as certain Mirta requirements. Singh described as "untenable" the requirement that Eskom provide a breakdown of "coal volumes burnt per station, per contact type and per supplier" and indicated that its request for condonation relating to primary energy would be "ongoing, until the methodology is revised". He said Eskom's comments in response to the methodology consultation paper included "viable alternatives".



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However, Busa said it would not support the “condonation of noncompliance with critical processes”. It also argued that the process for public participation on the matter was “inadequate”. Nersa gave interested parties until May 18 to comment on Eskom’s request and is expected to make a determination during the course of June.

Eskom leadership

Eskom corruption probe to be headed by retired judge

Public Enterprises Minister Lynne Brown has announced that she will institute a “broad scope” investigation into allegations of corruption currently hanging over State-owned electricity producer Eskom. The terms of reference and form of the investigation are still to be finalised, but Brown has indicated that it will be overseen by a retired judge, to ensure that the credibility of the remedial actions arising are not questioned. It is possible that the investigative work will be conducted by the Special Investigating Unit, with which the Department of Public Enterprises already has a memorandum of agreement. The terms of reference will likely include a review of seven forensic reports that have already been conducted into allegations of corruption and mismanagement at Eskom since 2007, including reports produced by Dentons, PwC and Deloitte.

Molefe removed as Eskom CEO, board might go too

Government on May 31 ordered that Brian Molefe’s return to the helm of Eskom be rescinded and conceded that it had inflicted reputational harm on the country and the power utility. Public Enterprises Minister Lynne Brown has hinted that she could also remove the board in June over the debacle that drew criticism from the African National Congress and sent the opposition to court to demand Molefe’s removal. Molefe left Eskom in November last year, after he was implicated in former Public Protector Thuli Madonsela’s report on State capture. He was reappointed in May, for the stated reason that he had mistakenly been granted early retirement which would entitle him to a pension pay-out of R30-million, a move that was vetoed by Brown. The Ministerial committee, however, stated that it was of the view that the board could have corrected the administrative errors relating to Molefe’s contract in other ways than reinstating him.

Transmission and distribution

City Power offers one-time reprieve for meter-tampering customers

Johannesburg’s City Power says customers who have illegally tampered with their electricity meters have an opportunity to claim amnesty and normalise their meters “no questions asked”, until June 30. Customers approaching City Power during the amnesty period to “register” the tampered meters will avoid being penalised through reconnection fees and average monthly consumption charges, and will have the meter reset free of charge.

Eskom removes power line to protect endangered bird species

Power utility Eskom has removed a section of an overhead power line that posed a hazard to endangered species, the Grey Crowned Crane. This followed an assessment into an incident reported to the Endangered Wildlife Trust (EWT) by a landowner in which a Grey Crowned Crane collided with the overhead Eskom line on a property near Hilton, in KwaZulu-Natal, late last year. The EWT, which has worked in partnership with Eskom since 1996 to mitigate the danger presented by electrical infrastructure to wildlife, explained that field officers went out with Eskom representatives to assess the line and compiled a field investigation report.

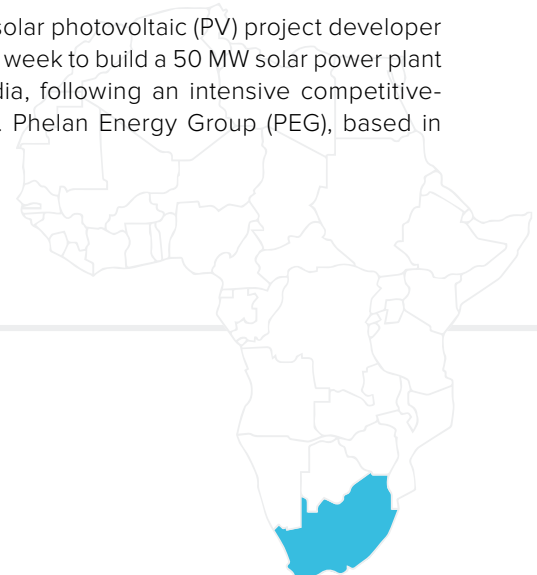
Other

Botswana power utility invites bids to build 100 MW solar plant

Botswana’s State-owned power utility has invited bids to build a 100 MW solar power plant to boost energy security in the country. In a document published on its website, Botswana Power Corporation says it expects energy demand to more than double to 1 359 MW by 2035 from around 600 MW. The development is expected to start two years from the appointment of a preferred partner.

South African solar firm in 50 MW India win after intense online bidding

A South African solar photovoltaic (PV) project developer won the right this week to build a 50 MW solar power plant in Rajasthan, India, following an intensive competitive-bidding process. Phelan Energy Group (PEG), based in



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Cape Town, prevailed in an online reverse auction involving 14 preselected solar companies, which duelled for more than ten hours on May 9 to secure the allocation at the Bhadla solar park. PEG reports that its Rs2.62/kWh bid, which translates to R0.54/kWh, set a new solar-tariff benchmark in India, coming in more than 15% lower

than a previous Indian record achieved in April. Media reports indicate that Avaada Power, of India, also bid Rs2.62/kWh for a 100 MW project at Bhadla, while SBG Cleantech bid Rs2.63/kWh to construct a 100 MW plant. A total of 27 bids, representing a combined 3 250 MW, were reportedly received for the 250 MW capacity on offer.

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